

Patent Abstracts of Japan

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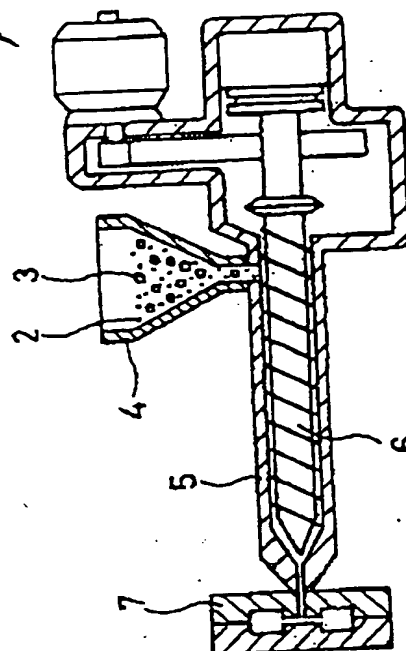
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TITLE : PRODUCTION OF FOAM OF
INJECTION-MOLDING



ABSTRACT : **PURPOSE:** To obtain lightweight foam of injection molding having low density and high strength by blending expanded particles with a thermoplastic resin having a lower softening point than the particles, heating the blend at a temperature <the softening point of the particles and \geq the softening point of the resin and injection molding.

CONSTITUTION: Expanded particles (preferably ones having $0.3-0.02\text{g/cm}^3$ density and $0.5-5\text{mm}$ average particle diameter such as polystyrene) 2 are blended with a thermoplastic resin (e.g. polycarbonate) 3 having a lower softening point, preferably $\geq 10^\circ\text{C}$ lower than the particles in the ratio of preferably (1:99)-(50:50) and heated at a temperature <the softening point of the particles, preferably <the softening point -5°C and \geq the softening point of the resin, preferably \geq the softening point $+20^\circ\text{C}$, injected into a mold 7 and molded to give injection molded foam (preferably one having $0.8-0.08\text{g/cm}^3$ density). Further in order to make the foam lightweight, the blend may be mixed with a blowing agent of thermal decomposition type.

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Beads in Thermoplast-Schmelze & Werten

Alt

M. Ziegler